The taxidermist's apprentice: stitching together the past and present of a craft-skill

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Abstract
How do you witness the development and reproduction of a craft practice? This essay explores this provocation in relation to the craft practice of taxidermy and, in so doing, aims to stitch together non-representational and historical geographic concerns within the discipline. Mobilising and developing on an Ingoldian perspective on the process of skill, the author places herself in the position of apprentice to a practising taxidermist in recognition that the position of learner is a highly instructive context in which to enquire into how present-day practice relates to a representational culture charting the development of the craft in historical 'how-to-do' manuals. When juxtaposing contemporary ethnographies of taxidermy practice with descriptions of practice in historical 'how-to-do' manuals, the author shows how past and present practice *resonates* rather than replicates. Overall, this article aims to introduce and develop theoretical and methodological pathways for studying and storying (historical) geographies of craft and skilled practices.

Keywords
apprenticeship, craft, enskilment, historical geographies of practice, non-representational theory, practical learning, storying, taxidermy

Introduction

This article is an attempt to historicise geographies of practice. However, rather than rendering geographies of practice *historical*, and therefore deadening them, I am using the verb 'historicise' intransitively in this article to emphasise that practices are a product of historical developments and to argue that, as such, we need to incorporate historical details and materials into our research in order to attend to how practices gain enough stability over time to reproduce themselves. To do so is to connect to and develop upon emerging work in geography concerned with thinking through the geographical and 'slow-creep' dynamics of body-practices of the '*longue durée*'.[1] While an increasing number of geographers are productively drawing on the process philosophies of Ravaisson and Deleuze to spotlight how *habit* is the slow-creep dynamic through which skills and proficiencies evolve and become refined over time through repetition,[2] I intend to mobilise and develop upon an Ingoldian perspective on the process of skill in order to emphasise how craft-skills gain temporal duration and spatial extension through differences *within* repetition. This argument emerges from ethnographic and archival research that I have conducted into the development and practice of the craft of taxidermy.

Taxidermy is the craft practice of preparing and mounting animal skins so that they appear 'lifelike'.[3] Considerable academic attention to date has been paid to the 'finished' form and display of taxidermy specimens inside cabinets, behind glass – in other words, to their representation.[4] In contrast, my (often collaborative) research and curatorial work have sought to focus on and re-present the practices and geographies behind the making of specimen animals and displays.[5] These efforts are aligned with non-representational arguments and approaches in cultural geography that seek to counteract 'deadening effects' in an emergent world through a prioritisation of practice[6] and elsewhere draw on research arguments and approaches originating in historical geography, cultural

anthropology and curatorial practice.[7] While my published and curatorial work to date have reconsidered what a taxidermy specimen is and can do through the performative presentation of the practices of their making, in this article, I aim to more explicitly address my efforts to witness the development and reproduction of taxidermy as a craft-skill. In this way, this article seeks to also contribute to theoretical and methodological engagements with craft and skilled practices both within and beyond geography. While an increasing number of geographers are investigating the material, practiced and embodied dimensions of contemporary craft and artistic practices,[8] I aim to develop theoretical and methodological pathways for studying and storying the *longue durée* (the long-term development) of such skilled practices.[9] However, where previously the so-called slow-time development of craft practices has unhelpfully led to a sense of craft conveyance as an unchanged tradition of practice seamlessly passed on from one generation to the next,[10] in what follows, and by juxtaposing contemporary ethnographies of taxidermy practice with descriptions of practice in historical 'how-to-do' manuals, I will demonstrate how past and present practice *resonates* rather than replicates. To begin, though, I address the question of how to witness the *longue durée* of (craft) practices in order to bring non-representational and historical geographic concerns into productive alignment.

Historicising geographies of (craft) practice

Attempts to re-focus cultural geographic concerns on performativity and bodily practices are linked to the inception of what Nigel Thrift described almost two decades ago now as 'non-representational theory or the theory of practices'.[11] While the aims, parameters and merits of the non-representational project have been much debated and critiqued since its original inception – and even within those purporting to do non-representational theory (NRT) 'proper', there is much debate[12] – what unites these diverse research efforts is the argument for a more democratic relationship between theoretical and empirical work. Instead of theoretically representing the world, those involved in the non-representational project have deliberately sought to attend to 'things taking place' – hence their empirical focus on embodied practices and dynamic processes.[13] Rather than seek after explanations that claim to go beyond what is being described, the aim, according to Alan Latham at least, 'is simply to present descriptions that are infused with a certain fidelity to what they describe'.[14] Dewsbury calls this stance a kind of 'witnessing', a stance that is oriented towards being 'in tune to the vitality of the world as it unfolds'.[15]

Problems arise, however, if your aim is to witness the historical development or reproduction of a craft practice as the immersive ethnographic methods that have been favoured to shed light on the material, practiced and embodied dimensions of craft-skills are not so easily transposed into historical modes of research. Many researchers have, therefore, implicitly distanced themselves from an ability to analyse the *longue durée of* craft and skilled practices as such analyses are often necessarily rooted in representational and linguistic forms of expression, that is, words, texts and archives. However, it is my contention that a non-representational approach need not be incompatible with an enquiry into the historical development of craft or skilled practices. First, NRT promotes an understanding of practices as 'material bodies of work or styles that have gained enough stability over time, through, for example, the establishment of corporeal routines and specialised devices, to reproduce themselves'.[16] Therefore, while practices are indeed processural and have emergent properties, their *emergence* or *emergentism* depends on what has gone before. Which is why Thrift in his collaborative work with Paul Glennie on the embodied history and crafts of clock time has gone as far to argue that studying practices of the *longue durée* should be a central concern of NRT because 'as one of the chief sources of renewal of social systems . . . practices and skills are, in a sense, a motor of history'.[17] Glennie and Thrift's survey of the repetitive ways in which bodies have been 'trained' to address the temporality of the world sets aside Thomsonian grand-narratives of social-historical change 'with their pleasing narrative curve through history', to instead focus on retracing 'the

accumulation of small differences upon which larger events often hang'.[18] By doing so, Glennie and Thrift underline the fallacy of presenting history, and the *longue durée* of practices, as a series of taken-for-granted sequential events/steps, which only serves to objectify and reify them. Rather than perpetuate linear and definitive accounts of historical change, Glennie and Thrift challenge us to write histor*ies* through polyrhythmic and multi-spatial narratives of practice.

This said, Glennie and Thrift are quick to acknowledge that it is difficult to witness the accumulation of small differences upon which long-term practices often hang as such differences are often 'all but extra archival'.[19] Here, Glennie and Thrift hit upon a problem common to historians attempting to retrace the development of practices: much of the everyday embodied past is unspoken and unwritten and therefore goes unrecorded. However, and this introduces my second point, an increasing number of geographers are demonstrating that it is possible to historicise geographies of practice without deadening what has gone before.[20] Responding to the theoretical agenda set by NRT, these researchers have sought to experiment and extend the mainstay of historical methods and empirical materials in order to retrace and re-present past (pre-discursive) practices. As Lorimer outlines in his most recent review of the sub-discipline, historical geographers have drawn creative resource from both conventional and less conventional sources to explore historical geographies of practice, skill and embodiment, including visual sources and records, oral history, music and sound recordings, material artefacts and remainders and even physical landscapes.[21] Moreover, in the face of archival absence, Glennie and Thrift argue that 'the most fitting way to study practices of the *longue durée* is as a set of symptoms and clues whose reading requires a mixture of deduction and intuition'.[22] Here, they defer to the historian Carlo Ginzburg's conception of 'elastic rigor',[23] a concept that calls for faith in the historian's ability to generate 'conjectural knowledge' where evidence is partial or incomplete and thus on their 'intuition built up from experience'.[24]

However, while I am in agreement about giving serious credibility to the historian's own craft practice – her or his own 'embodied' doing of history – my concern with the type of 'New Historicism' informing Ginzburg's conception of elastic rigour is that it relies heavily on narrative to 'fill in the gaps', something which Glennie and Thrift themselves acknowledge: 'problems of inference are often overcome by sheer good writing'.[25] For example, while Hayden Lorimer, John Wylie and Derek Mcormack have all artfully crafted experimental and performative modes of writing to convey something of the eventfulness of past practices, places and events,[26] such performative writing styles have elsewhere been critiqued for being self-indulgent, neo-romantic and obscurantist.[27] In my opinion, Eric Laurier and Chris Philo's 'undefined investigations' offer a more straightforwardly practical response to the (im)possibility of historicising geographies of practice.[28] To avoid stipulative treatments of social and historical practices, they advocate the undertaking of 'investigations which do not begin by defining their phenomena, but seek instead to learn from the investigation'.[29] Drawing together the merits of ethnomethodology and Foucauldian historiography, they promote detailed empirical studies that are both faithful to the sources through which social and historical practices are encountered and 'the places, events and occasions' out of which these research encounters emerge.[30] This requires researchers to immerse themselves in the phenomena being studied (even if that encounter occurs in an archive) to the point that they are 'becoming the phenomena'.[31] While I do not find favour with the theoretical antecedents of their self-titled 'ethno-archaeological' approach, what Laurier and Philo's work underlines is that it is direct observation and description of practical encounters and empirical materials that matters most. However, I would like to argue that witnessing the reproduction of a craft practice demands more than observation, and to do so is to connect to Thrift's flipping of 'participant observation' to 'observant participation'. This shift in focus from observation to participation demands that the researcher take up a more immersive position than that offered by traditional participant observation, where the researcher remains in a space of both conceptual and practical remove from the field site and/or practice at hand. However, while Dewsbury rightly cautions that this move 'is not an argument for losing

ourselves in the activity and deterritorializing ourselves completely from our academic remit', in immersing ourselves in the space or practice, the aim is to gather 'a portfolio of ethnographic "exposures"' that can act as 'lighting rods for thought' and/or produce 'a series of testimonies to practice'.[32] Although Dewsbury does not expressly state that these 'exposures' might be archival as well as ethnographic, it is my contention that they can be.[33] Therefore, in order to witness the development and reproduction of taxidermy as a craft practice, my aim was to gather a portfolio of ethnographic *and* archival 'exposures' that would produce a series of testimonies to the continuity of that craft.

Becoming taxidermist and working with an ethic of apprenticeship

My first move to immerse myself in the development of taxidermy as a craft practice was to consult a collection of late 19th-century and early 20th-century instruction manuals. However, although these manuals contained detailed written instructions in 'how-to-do' taxidermy and were accompanied by illustrative plates that, in effect, charted the establishment of the craft's corporeal routines and specialised tools and devices, their formulistic and representational nature meant that they failed to fully express how the craft was reproduced *in and through practice*. Here, I turn to the thought of long-time theorist of skill Tim Ingold,[34] for whom the relation between practical enskilment and the transmission of information through formal instruction is also problematic: 'If skilled practice can't be reduced to a formula, then it can't be through the transmission of the formulae that skills are passed from one generation to generation'.[35] It is Ingold's contention that craft and skilled practices are 'refractory to codification in the programmatic form of rules and representations' and thus that each generation cannot contribute to the next simply 'by handing on a corpus of representations'.[36] Ingold's body of work has steadily overturned the orthodox view that skill is the mere application of knowledge or cultural coda, by demanding instead a perspective that situates the practitioner, right from the start, in the context of an active engagement with the constituents of his or her surroundings. According to Ingold's 'ecological perspective', skills and craft practices are neither innate nor acquired but are rather 'grown': 'incorporated into the human organism through practice and training in an environment'.[37] Moreover, Ingold's focus on practical enskilment, conceived as the embodiment of capacities of awareness and response by environmentally situated agents, has helped us to overcome the overly rigid divisions between mind, body and environment that have plagued prior theorisations of skill and craft. It also takes us closer to an understanding of enskilment, or practical learning, as an emergent, relational and situated process that arises throughout the course of practical activity and within ecologies of practice. For Ingold, then, each generation contributes to the next not by handing on a corpus of representations, but rather by incorporating the novice or apprentice into ecologies of practice that afford them with opportunities and scaffolding to 'regrow' the craft.[38]

Thus, my second move was to place myself in the position of apprentice to a practicing taxidermist – Peter Summers at the National Museum Scotland (NMS) – in recognition that the position of apprentice or 'learner' was a highly instructive context in which to enquire into how a craft is reproduced, or 'regrown', in practice. This placement was guided by Ingold's argument that

> placed within a situation of this kind, the novice is instructed to attend particularly to this or that aspect of what can be seen, touched or heard, so as to get the 'feel' of it for him- or herself. Learning, in this sense, is tantamount to an 'education of attention'.[39]

Ingold takes the phrase – 'education of attention' – from ecological psychologist James Gibson,[40] who argues that we learn not by taking on board mental representations or schemata for organising the raw data of bodily sensation but by a fine-tuning or sensitisation of the entire perceptual system (comprising the brain and peripheral receptor organs along with their neural and muscular linkages)

to particular features of the environment.[41] Akin to Thrift's notion of 'qualculation', this is a form of learning that emerges through a unitary circuit of body–brain–environment: a finely tuned thinking–acting that emerges through the process of an activity and within settings of practice.[42] Thus, this kind of learning counterposes the theory of learning long favoured by cognitive science, what Lave has called 'the culture of acquisition',[43] which depends on the practitioner first internalising a body of context-free knowledge in the form of rules and schemata. According to Gibson's ecological perspective, it is not possible to separate learning from hands-on contexts of doing, which is why the study of skill according to Ingold 'demands an ecological approach'.[44] By placing myself in the position of apprentice to highly skilled taxidermist Peter Summers, I not only wanted to gain a 'feel' for the craft but enquire into how, and if, Peter's present-day practice related to a representational culture charting the development of the craft in historical 'how-to-do' manuals. While I am in agreement with Ingold that craft practices are refractory to codification in terms of any formal system of rules and representations, it is my contention that historical 'how-to-do' manuals can offer insights into how taxidermy was being practised in the past and therefore the ecologies of practice that have enabled its reproduction from one generation to the next. According to Ingold, it is through the reproduction of these ecologies of practice, and not the transmission of static cultural instructions, that the continuity of a craft practice depends. However, by continuity, Ingold does not mean the unbroken or consistent existence or operation of a craft over time, rather the continuity of a craft depends on the apprentice or novice being introduced into contexts that afford them the opportunities, scaffolding and space to both 'grow into' and 'regrow' those craft-skills. As such, the essence of skill for Ingold comes to lie in 'the improvisational ability with which practitioners are able to disassemble the constructions of a craft or technology, and creatively to reincorporate the pieces into their own walks of life'.[45]

This links to David Bissell's recent critique of the 'slow-creep dynamic' through which skills and proficiencies are understood to evolve and become refined over time through repetition and habit. While an increasing number of geographers are productively drawing on the process philosophies of Ravaisson and Deleuze to spotlight how habit is the slow-creep dynamic through which skills and proficiencies evolve and become refined over time through repetition, the emergence of skill for Bissell is less about trust in the narrowing and perfecting of movements through the drilled repetition of practices and more about the supple exposure to more volatile forms of life that just might develop the skill in a new direction.[46] However, Bissell has gone further to argue that skills 'might be better understood as competencies that temporarily possess us: fragile proficiencies that evolve in ways that unsettle the predictabilities inherent to more slow-creep understandings of practical refinement'.[47] While I wouldn't go as far as Bissell to argue that skills 'possess us', as such an argument would seem to suggest that skills exist outside of contexts of practice, I do agree, and guided by Ingold, that craft-skills gain temporal duration and spatial extension through differences *within* repetition. For example, for Ingold, it is only through repeated practical trials and error that the novice or apprentice gradually gets the 'feel' or rhythm of a skill or craft and thus that rhythmicity implies not just repetition but 'differences within repetition'.[48] Therefore, a fluent craft performance, and thus the continuity of a craft tradition, depends on imperfections in the ecology calling for continual revision. In other words, it is the accumulation of small differences upon which a craft practice and its continuity depend. In what follows, I juxtapose ethnographic 'exposures' of contemporary taxidermy practice with the descriptions of practice in historical 'how-to-do' manuals to explore and demonstrate how taxidermy practice has achieved temporal duration and spatial extension through such accumulations.

However, before presenting my analysis of taxidermy practice, a few qualifications about my apprenticeship need to be made. While this apprenticeship included my learning 'how-to-do' certain aspects of the craft, this article will largely draw on my witnessing, and video-recordings of, Peter's practice. On my first visit to Peter Summers' workshop, he decided to demonstrate the setting up of an avian cabinet skin (the 'loose-stuffed' method) as it was the first method that he had been taught

as an apprentice taxidermist and thus reasoned that it was the best introduction to the craft. Following Peter's lead, I shall be using this lesson as my empirical case study as the 'loose-stuffed' technique is also the first method the period taxidermy manuals suggest be attempted by the apprentice taxidermist since it requires the least in the way of technical competence, tools and materials. It was also the first technique that I tried my apprentice hand at, and although I do not specifically draw on this experience in my empirical analysis, it does infuse my understanding about difference and repetition in the context of the archival instructions, the contemporary practice witnessed and the relation between the two. I have chosen to juxtapose sections of instruction in the 'loose-stuffed' method from Montague Browne's 1878 text *Practical Taxidermy* with Peter's practice because Browne's instructional writing, unlike many of his contemporaries, retains a sense of the processional nature of the procedure.[49] For example, Browne at the outset outlines that his instruction in the setting up of a cabinet skin is 'thoroughly practical' by design:

> In order that this shall be a thoroughly practical chapter, I will, in my method of working, copy the admirable plan of my old sporting favourite, Col. Hawker, who, when wishing to note down some difficult point, was in the habit of doing with his own hands all things pertaining to the matter at issue . . . with the bird before me I will thus minutely instruct my pupil, pointing out each step that has to be taken and each difficulty that is likely to arise.[50]

This qualificatory statement communicates that Browne's instructional writing was directly informed by his doing of the task. Thus, his writing conveys a sense of the synergy between practitioner, tool and material during the happening of practice that is largely absent from other instructional accounts from the same period:

> Now, keeping the head of the bird towards you, part the feathers away from each side of the breast bone; then with the knife held short in the hand, the point is placed exactly in the centre of the bird . . . Now turn the bird towards your right, and gently lay hold of the cut edge of the skin . . . .[51]

Browne's instructional text can therefore be considered as much 'ethnographic exposures' as my own re-presentations of Peter's practice through descriptive writing and video stills. And just as video footage 'holds the promise that the researcher might examine past activities not as past but rather as "formerly present"',[52] processional instructional writing can also be understood as offering a portfolio of ethnographic exposures that can enable a researcher to revisit and immerse themselves in a craft practice as it unfolds. By stitching past and present together, I thus hope to demonstrate that although Browne's and Peter's craft performances are taking place over a hundred years apart, they can still be shown to *resonate*.

Crafting a cabinet skin across time and space

> The reason birds are always selected is because of easiness of treatment for the student's first lessons in taxidermy, before his teacher allows him to 'try his "apprentice hand"' on the more difficult branches of the art.[53]

Montague Browne instructs that before the operation begins, 'a skinning knife, scissors, cobbler's crooked awl, a pot of preservative, cotton wool or wadding, some tow and a needle and thread' should be laid out, noting that

> the chief point of difference between the skilled and the unskilled workman is, the former may and often does get the best results with the fewest possible tools, while the other must surround himself with dozens of unnecessary things before he can 'do a stroke'.[54]

Peter only has a scalpel, a small pair of scissors and a tub of borax immediately ready for use. And while Browne has 'procured a starling' (see Figure 1), Peter goes to fetch a redwing from the freezer which he says he has been asked to set up as a cabinet skin.[55] (A cabinet skin or 'study-skin' is a skin persevered for a scientific collection and therefore only needs to be persevered using the 'loose-stuffed' method as is it will remain in storage; see Figure 2a.)

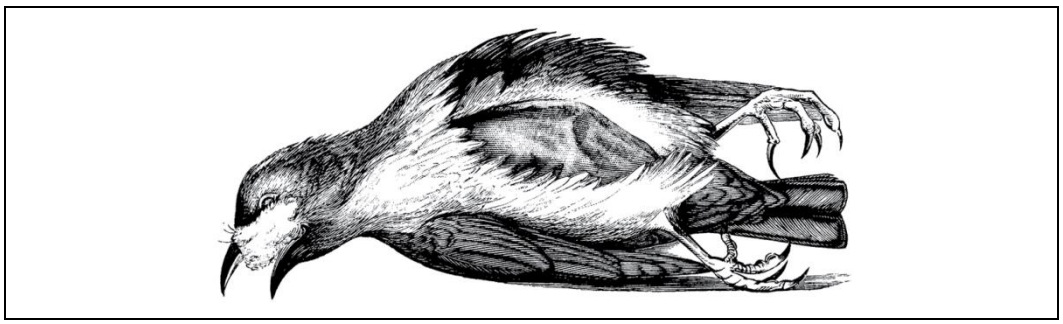

Figure 1. Starling with throat plugged.
Source: Montague Browne's 1878 *Practical Taxidermy*.

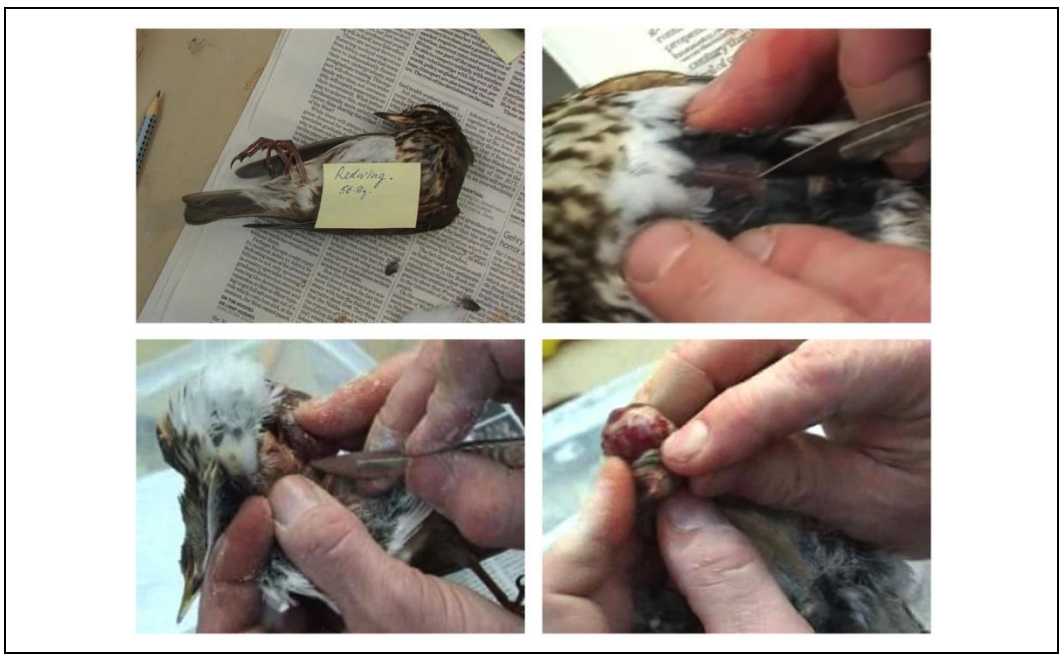

Figure 2. Video stills.
Source: Merle Patchett/NMS.

Once the bird has been given time to thaw, Peter works out the rigour mortis by gently warming and articulating all the joints with his hands. When fanning out the wings, Peter exposes the distinctive red patches on the undersides, remarking that this is the source of the bird's name. He notes that it is important to work out the rigour mortis so that the bird can be teased into a soft and malleable state with which to proceed. It is also a good opportunity to inspect the state of the specimen and note down all the measurements for the scientific label: its weight (56.8 g), wing

measurement (120 mm) and sex (male). Peter then moves back to the bird and plugs its throat with cotton wool (see Figure 1), revealing that the plug prevents the bodily fluids from oozing out of the mouth when skinning. Skinning can now commence:

> Now, keeping the head of the bird toward you, part the feathers away from each side of the sternum or breast-bone; then with the knife ***held short in the hand***, the point placed exactly in the centre of the bird (calculating from the bill to the tip of the tail), make the first incision just on the right side of the breast bone down to the vent, taking care not to cut so deeply as to expose the intestines.[56]

Peter lays the bird in front of him on its back with the head pointing away and tells me that he is parting the lower abdominal feather tract, and then he wets the 'downy' feathers with a little water in order more easily to expose the skin beneath. It is surprising to learn that a bird is not completely covered in feathers but that the feathers run from a number of tracts. Once he has exposed the belly, Peter picks up the scalpel (which he holds in a pencil-grip) and, while holding the feathers apart, he begins to make a 'dorsal incision' in the middle of the breast bone and slices through the skin, slightly to one side of the abdominal cavity, to just above the bird's vent (see Figure 2b). Peter cautions that it is very important to ensure that the abdominal cavity is not pierced during this procedure (hence why the incision was made slightly to the right) because, if the cavity is punctured, acid bile from the stomach and intestines could be expressed, spoiling both the skin and feathers and thus the specimen.

The first incision cut is a critical moment in the implementation of all taxidermy procedures, as one wrong move with the scalpel at this stage can see the specimen entirely ruined. Tim Ingold has described such a moment in the implementing of any task as 'the moment at which rehearsal ends and performance begins'.[57] This is the point at which there is no turning back, as, unlike when drawing, an incision made with a scalpel cannot be rubbed out. Therefore, as Ingold acknowledges, '[t]he skilled practitioner must choose his moment with care, knowing that to set out before one is ready, or alternatively to allow the right moment to pass unnoticed, could jeopardize the whole project'.[58] This jeopardy also relates to what David Pye has called 'workmanship of risk', whereby the practitioner must be alive, throughout the process, to the danger things may go awry. Ingold notes that the moment of 'setting out' is therefore also marked by a switching of perspective 'from the encompassing view of the umbrella plan to a narrow focus on the initial point of contact between tool and material'.[59] Instead of working successionally from one discrete phase of the procedure to the next, then, Peter is working processionally, responding to the immediacy, particularities and risks of the emergent task. As such, Peter is concentrating *through* rather than on the sensations of the emergent cut. Thus, 'concentration' during craft practice is not the mere application of human intentionality on inert and passive materials. Rather, and following Ingold's ecological perspective, concentration means the focusing and gathering together of the energies and materials that make the entire field of action possible. Therefore, the processural quality of a practice emerges through not only the coupling of perception and action but also the synergy of practitioner, tools and materials. Therefore, 'setting out' gives way to 'carrying on' through this co-production.

For example, through making the incision cut Peter is also readying the bird for the next stage in the performance, by gently pulling apart the skin with the fingers that he has been using to keep the feathers parted (see Figure 2b). Once he has cut to the vent, he turns the scalpel around and, gripping the skin in one hand, uses the blunt end of the scalpel to part the skin from the body by placing it in between the two and gently levering them apart. He does this on both sides of the incision cut until the leg sockets are exposed. At this point, he puts down the scalpel and works the knee joint up out of the socket until it is exposed, whereupon he cuts through the joint using a small pair of scissors and cleans the bone of all flesh and muscle. He then replaces the cleaned leg back in its 'trouser leg' and repeats the process on the other side, before turning to release the tail:

> Taking up the knife again, carefully ***work with it*** towards the tail, and as far round the back as you can get with safety. Now let the bird rest on its head, as it were, with the beak from you, and, placing the fingers with the thumb on the back (which is now underneath), the middle finger on the root of the tail inside, flanked by the first and third fingers keeping down the skin on either side, cautiously insert the knife through the skin of the vent, and cut that free, cutting upwards in a slanting direction; having done this, carefully cut away the root of the tail, at the same time freeing it wherever it sticks; then, when nothing but one bone, that is to say, the last caudal vertebra, holds it, slip the knife underneath and cut with a drawing motion upward. Now advance the fingers of the left hand and seize the bottom part of the loosened body with the right hand, and by pushing with the finger-nails, and occasionally using the knife where the tendons hold the skin, gradually work up the back, turning it round and round, and working very carefully until the wings are arrived at.[60]

Once the shoulder joints are exposed on either side, Peter informs me that the wing bones must be cleaned in much the same manner, as were the lower leg bones. At this point, he uses the point of his scalpel to dislocate the wing bone (head of the humerus) from the shoulder joint (see Figure 2c) and repeats this on the opposite side. Peter then tells me that the wing bones are much easier to access and clean once the skin has been inverted over the head and the body completely detached.

To invert the skin over the skull, Peter first wets the skin around the skull as otherwise the skin can tear. He explains that specimens taken from the freezer often suffer from 'freezer burn', a condition that can make the skin very dry and susceptible to tear. Peter instructs that the technique for inverting the skin over the head is to do it evenly so that there is no pressure exerted on any single point. This means peeling the skin over the skull evenly on each side with either index finger. When the ears are reached (see Figure 2d), these are pulled out of their sockets using the fingers and a little borax for grip. Peter then continues to peel back the skin until the eyes are reached, whereupon he places the bird back on the table and begins to cut through the orbital skin with a scalpel (see Figure 4a). Here, he elaborates that it is important to cut with plenty of excess rather than cut through the eyelid and ruin the skin as any excess can be removed more easily at a later stage once the skin is fully removed from the body.

Much like Browne instructed above, Peter is 'work[ing] *with*' the tools at his disposal.[61] However, where Browne must hold his 4-in blade of his knife (illustrated on p. 54) 'short in the hand' to command the point of the blade, Peter's 1-in scalpel blade has been designed to be held in a precision pencil-grip. The scalpel in this instance becomes an extension of Peter's body, and this observation is in tune with Lucy Suchman's notion of the 'amplified body'.[62] Yet according to Suchman's thesis, tools and technologies are not just extensions of the body, but rather are integrated *into* the body. Michael Callon and John Law explain that in this sense 'they have become wearable, and what is worn, as Suchman notes, is intertwined with the person who wears it'.[63] The scalpel, in effect, has been integrated into Peter's hand to create an amplified finger – what Thrift elsewhere has described as the 'human body as tool-being'.[64] This kind of thinking does not presume an initial separation between the user and the used, between subject and object, for which many earlier accounts of skill and tool use have been criticised. The problem according to Ingold is that many of these accounts, like that of Marcel Mauss' *Body Techniques*, approach both bodies and tools out of context, as things-in-themselves. Rather, as Ingold argues, it is only when tools and bodies are considered within a field of effective action – that is, when they are 'brought into use' – that they can be understood to work in synergy.[65] However, I would like to argue that this field of effective action also depends on the 'amplified body' being brought into what Donna Haraway would term 'in-touch' with the material ecologies of a practice.[66] Peter's amplified body is not working *on* inert and passive materials; rather, he is working *with*, and even to an extent being led by, the corporeal, material and affective affordances of the redwing bird-body. The processural quality of tool use therefore depends on the synergy, or relational interconnectedness, of practitioner, tools *and* materials.

Once the orbital skin has been cut through with a scalpel, Peter then uses the bottom end of the scalpel to lever out the eyes from their sockets. Once out of the socket, he puts down the scalpel and

simply pulls the eyes clean from the socket, detaching the optic nerve in the process. He then picks up the bird and continues to peel the skin down to the bill line. He turns the bird over and works the skin off the underside of the tongue and jaw line using his thumbs. He detaches the tongue by picking up the scalpel and sliding the blade between the tongue and the skin, cutting the tongue away from the jaw line. He pulls the tongue out along with the cotton wool plug inserted earlier. He now instructs me that the body can be completely separated from the skin by severing through the neck at the atlas (see Figure 3, A–B). Peter does this by deftly dislocating the spinal column with his thumb and index finger and then pulls it, along with all muscle and flesh, completely clean from the skull. The body has now been completely detached and Peter puts it to the side (he will check the sex of the bird later). Now, only the skull and the skin, turned inside-out and attached at the bill line, remain. Peter now moves to remove the brain. To do this, he pierces a smallish hole in the skull using the sharp point of his scissors; gripping cotton wool with tweezers, he slides it into the skull cavity and cleans out the brain and soft tissue (see Figure 4b). Now, the skull is clean, and Peter turns his attentions to cleaning out the wings:

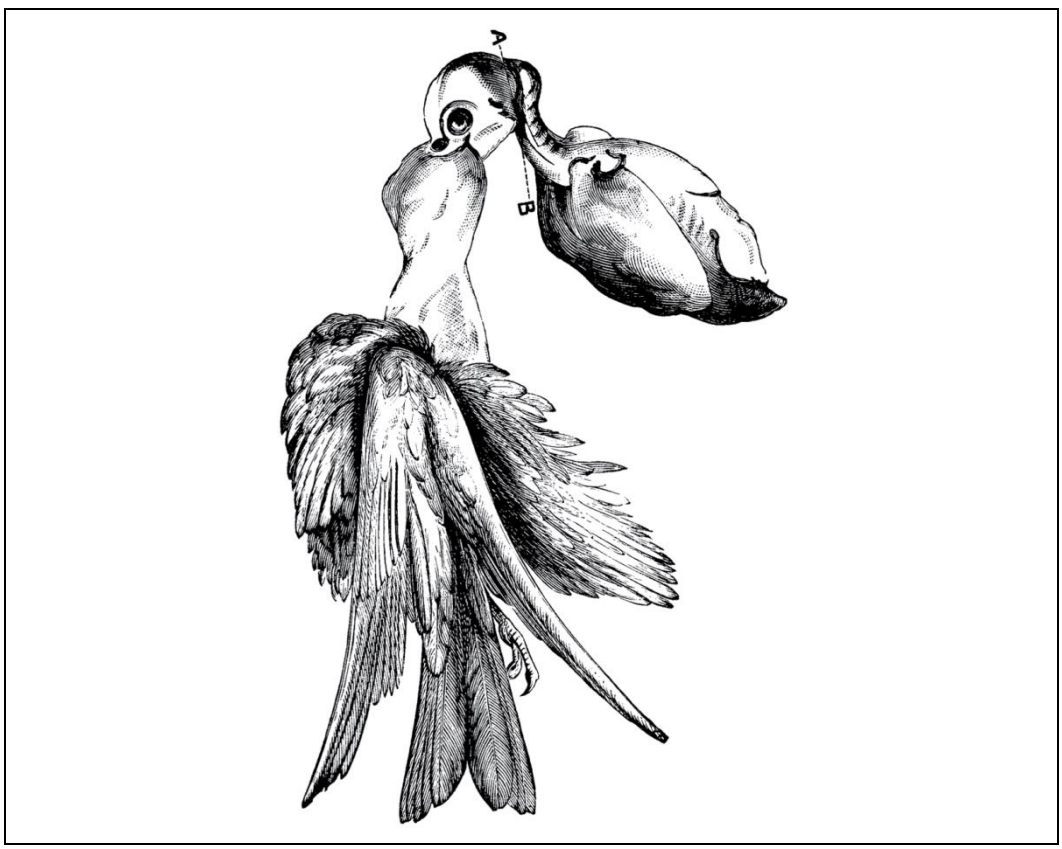

Figure 3. Detaching the skin from the body.
Source: Montague Browne's 1878 *Practical Taxidermy*.

> I will in this case take the wing on my right. Place the right hand underneath, lift the wing up as far up into the skin as possible, and by holding it tightly in that position with the finger and thumb of the left hand, a ridge of skin becomes visible, running down each side, and framing in, as it were, a little oval shaped piece of flesh, *i.e.*, that lying between the 'radius' and 'ulna'. The bone and the flesh of the wing is now turned towards you. Clean the flesh away from this and then devote attention to the before-named oval piece of flesh. Putting the point of the knife down on the right, scoop away (using the greatest care meanwhile) some

> small pieces of flesh. This by degrees reveals the top of another little bone, from which all the flesh to be seen must be scraped away; anoint this freely with the preservative, and return it to its normal position. If this process is too tedious, or not quite comprehended by the amateur – *i.e.*, the clearing out the flesh between the radius and ulnae – the smaller bone of the two – the radius may be twisted or cut out entirely, leaving only the larger bone of the two to clear of flesh. Do the same by the other wing . . . .[67]

After the wing bones have been cleaned of all flesh, Peter instructs me that before the skin can be washed all the remaining connective tissue must be removed. Here, Peter scrapes away the connective tissue using his thumb nails telling me he is paying particular attention to 'freeing' the feather tracts as any tissue left around them will dry and impede the movement of the feathers. He then cleans the tail stump of any remaining flesh using the scalpel blade. Once the skull, remaining bones and skin have been cleaned of all flesh, muscle and connective tissue, Peter

Figure 4. Video stills.
Source: Merle Patchett-NMS.

immerses the skin in a pastosol bath (pastosol is an industrial soap). Ensuing that the skin is 'fully wetted' first, he then works the skin back over the skull so that the bird skin is back to 'outside-out' (see Figure 4b). Peter then leaves the bird to soak for a while so that the pastosol can be given time to remove any grease or dirt from the skin and feathers (see Figure 4c).

With the skin fully dry, the job turns to preparing the skin as a study specimen or 'cabinet skin'. At this point, Montague Browne working in the 19th century would have anointed the inside of the skin in a preservative solution:

> Having skinned a zoological specimen, we require, as a matter of course, to anoint the inside of the skin with some preservative, for the purpose of arresting decomposition and general decay, and also defending it from the ravages of insects for indefinite period.[68]

However, where arsenic was considered the preservative of choice by Browne's contemporaries, he warns against its use, questioning, 'Why use a dangerous and inefficient preservative agent, when a harmless preservative, and that quite as good a worker and dryer as arsenic, will suffice?'[69] Instead, he promotes his own recipe for a non-poisonous preservative made up of whiting or chalk (2.5 lb), soft soap (1 lb), chloride of lime (2 oz) and tincture of musk (1 oz). Peter meanwhile asserts that there is no preservative that can both preserve the skin and ward off insect attack. He instructs that all the taxidermist can do is ensure all fleshy matter is removed from the skin, that the skin is fully dry and that it is stored appropriately. Therefore, Peter merely sprinkles the skin with a little borax before continuing to set the redwing skin up as a cabinet skin.

To do this, Peter wraps a little cotton wool around the remaining leg bones, wetting the cotton wool slightly so that it will stick to the bone. Then, he takes a narrow splint and wraps cotton wool around the tip (again wetting it) to form a blob that will fit into the hole made in the cranium. He inserts the splint into the cranium and then proceeds to fill out the throat, crop, wings and main cavity with cotton wool, using tweezers to do so. Once the skin is sufficiently filled, Peter begins delicately to sew up the main cavity using a fine needle and cotton thread (see Figure 4d). He tells me that he is using an under stitch technique so that the stitching is less visible on the outside of the skin. He makes slight adjustments as he moves from one side of the cut to the other, indicating that he is leaving the stitching loose so that he can pull the skin evenly together without any bumps or capturing any feathers when he reaches the end of the cut. By leaving the stitching loose, Peter is able to continually correct the alignment of the skin through the placing and pulling of the stitches: adjusting each time he places a stitch on each side and pulling the thread slightly tighter after each stitch to see whether he is stitching evenly up the cut. As a consequence, no two stitches are the same as he moves back and forth across the cut. Yet, this is also precisely why Peter's movements can be considered rhythmic rather than repetitive. According to Ingold, a fluent craft performance is rhythmic 'only because imperfections in the system call for continual correction'.[70] This form of 'sensory correction' is a hallmark of skilled practice according to Ingold as it depends not only on the multisensory coupling perception and action but also on the working together of practitioner, tool and material. Ingold makes this point in order to counter the widespread misapprehension the training of the body through repetitive movement leads to the progressive loss of concentration. Rather than awareness retreating and movement flowing involuntarily, Ingold argues a skilled craft performance is

> rhythmically responsive to ever changing environmental conditions. In this responsiveness there lies a form of awareness that does not so much retreat as grow in intensity with the fluency of action. This is not the awareness of a mind that holds itself aloof from the messy, hands-on business of work. It is rather immanent in practical, perceptual activity, reaching out into its surroundings along multiple pathways of sensory participation.[71]

Thus, in sewing, Peter is not only concentrating by visually monitoring the stitching together of the skin but by responding to the flex and taut of the skin when pierced and pulled with needle and thread. The taxidermist is thus obliged to 'follow the material' and rhythmically respond to and negotiate its affordances while stitching back and forth across the cut. As such, each stitch 'grows out of the one before and prepares the next'.[72] Peter's rhythmic responsiveness to redwing skin ensures that, as he pulls the stitching tight, the two sides align without the skin puckering or any feathers being sewn in just as per Browne's instructions:

> Neatly sew up the skin with fine needle and thread by an under stitch on the edges of the skin, drawing it tight only after two or three stitches; and thus proceed until the bottom is reached, avoiding the common fault of sewing the feathers in with the stitches.[73]

By stitching together sections of Browne's instruction with Peter's practice, my aim has been to bring the paths of two taxidermists working over 100 years apart into alignment. Thus, while there are differences within the paths of their performances (e.g. Browne sews his skin from top to bottom) and tools and materials (e.g. differences in craft knives, bird species and preservative/drying agent), they have also been shown to follow on from each other. Moreover, the fact that Peter was initially apprenticed at the Leister Museum (where Montague Browne worked and devised his methods) and learned to preserve skins there shows that, although they never met, the lifepaths of their practice 'carry on' from each other too. Peter even revealed to me that he had been encouraged to consult Browne's manuals when apprenticed at the museum. In this way, every time Peter sets out to make a cabinet skin, he 'picks up the strands of [Browne's] past practice and carries them forward into current contexts'.[74] Following Ingold, the skilled practitioner can therefore be regarded as a storyteller re-enacting the rhythm of a practice that has developed through repetition as it has been passed on from generation to generation. Yet as already noted, rhythmicity implies not just repetition but also differences *within* repetition as imperfections in the system call for continual revision as a practice is not only refined but regrown over time and space.[75] For example, on asking Peter why he sews his skins from bottom to top, he stated that that felt better to him as you finish at the point where you started. This speaks to the revisions a practitioner makes as they move away from instruction and develop their own rhythm in practice. While many geographers are spotlighting *habit* as the slow-creep dynamic through which skills and proficiencies are refined over time through repetition, I hope to have shown that this dynamic, or rather rhythmicity, resonates with differences within repetitions. For it is difference that ultimately creates resonances not only in the rhythmic ecology of practice but also across the rhythmic continuum of its *longue durée*. For example, Peter's use of the scalpel speaks to the development of tool use since Browne's period of practice. Where Browne had to hold his 4-in blade 'short in the hand' to gain greater control over its point, Peter's scalpel is specifically designed to be held in a pencil-grip. The scalpel's precision of hold and smaller and thinner blade, therefore, amplify the synergy between practitioner, tool and material in Peter's contemporary taxidermy practice. Furthermore, Browne's use of his own non-poisonous preservative solution and Peter's use of borax speak to the 'slow-creep' replacement of acute poisons like arsenic with synthetic and natural insecticides in museum taxidermy over the course of the 20th century.[76] Therefore, it is precisely because there are differences in Browne's and Peter's performances (and their tools and materials) that they can be said to *resonate* rather than *replicate*.

After the final double stitch, Peter then cuts the splint (which he left a gap for it to stick out of) just shy of the tail feathers. He then picks up the skin and inspects for any feathers out of place, paying particular attention to realigning the wing feathers at the back. Peter then fashions a 'poke' for the skin out of cardboard and places the skin inside it (this ensures that the bird keeps its shape when drying). He then puts the skin on a drying tray where he says he will leave it for 4–5 days before it goes to the study collection (see Figure 5). Peter then proceeds to clean and replace all of the tools that he has been using as although the present task has been completed, 'putting things away in the right places is a way of getting ready. Thus in the use of tools, every ending is a new beginning'.[77]

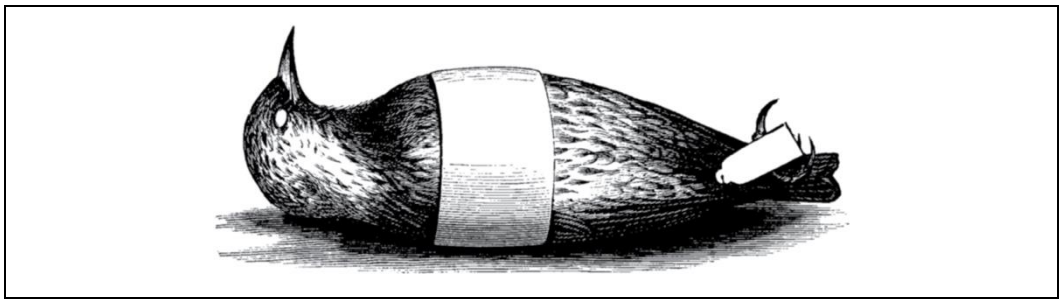

Figure 5. Skin drying and setting.
Source: Montague Browne's 1878 *Practical Taxidermy*.

Storying craft and skilled practices

At the outset of this article, I stated that my aim was to historicise geographies of practice without deadening them. At the close of this article, I would like to argue that this requires the 'storying' of practice.[78] There are three key elements to this endeavour. First, to story practice is to recognise that practices, just like stories, neither 'come ready-made from the past, embedded in a static, closed tradition', nor 'are they constructed de novo, moment by moment to accord with the ever-changing conditions of the present'.[79] Rather practices, to follow Ingold, involve 'the alignment of present circumstances with the conjunctions of the past'.[80] By stitching together ethnographic descriptions of contemporary practice with descriptions of practice from historical 'how-to-do' manuals, my aim has been not only to demonstrate that Montague Browne's and Peter Summers' performances could be brought into alignment but to emphasise that *every* craft performance 'picks up the strands of past practice and carries them forward in current contexts'. However, where previously the so-called slow-time development of craft practices has unhelpfully led to a sense of craft conveyance as a static tradition of practice seamlessly passed on from one generation to the next, I hope to have emphasised in the previous section that the continuity, or *longue durée*, of a practice resonates with differences within repetition as it is refined and revised over time and space. In other words, it is through *instability* – the small differences upon which continuity depends[81] – that craft and skilled practices gain temporal duration and spatial extension. Thus, it is precisely because there are differences in Browne's and Peter's performances that they can be said to be continuous.

Second, to story practice is also to recognise that it is co-authored. Where for Ingold the craft practitioner is to be considered 'both biographer and autobiographer' of the craft 'story', I hope to have demonstrated in the last section that the tools and materials of taxidermy are as involved in authoring the practice.[82] For just as concentrated within the practitioner's body are 'capacities for movement and feeling that have been developed through a life-history of past practice',[83] I would argue that concentrated within the dead bird-body are capacities for moving, if not quite 'feeling', that guide the craft performance in certain directions. This is why I argued that 'concentration' during craft practice is not the mere application of human intentionality on inert and passive materials, but is rather the focusing and gathering together of the energies and materials that make the entire field of action possible. The processural quality of a practice therefore emerges through not only the coupling of perception and action but also the synergy, or relational interconnectedness, of practitioner, tools and materials. The story of (taxidermy) practice is therefore co-biographical rather than auto-biographical.

This said, some may find it problematic that where in Browne's descriptions of practice the co-authorship between practitioner, tools and materials is emphasised: 'Taking up the knife again, carefully ***work with it*** towards the tail, and as far round the back as you can get with safety . . . .', my descriptions of Peter's practice seem to figure him as the sole authorial agent: 'Peter then continues

to peel back the skin until the eyes are reached, whereupon he places the bird back on the table and begins to cut through the orbital skin with a scalpel'. Part of this difficulty arises from the stage of my apprenticeship as I was witnessing and documenting the task as it unfolded instead of being actively involved in the practice myself. It is hardly surprising that I would, in the first instance, look to Peter to guide me through the task and why in turn he played such a prominent role in my retelling. This said, I did try to counter my centring on the human subject. Having since tried my own hand at crafting a cabinet skin, I know that it is often the bodily and affective affordances of the dead bird that guides practice, which is why I chose to in*corporate* Browne's illustrations of the starling and my own video stills of Peter *working with* the redwing into the analysis. And although this form of in*corporation* will inevitably 'fall short'[84] of emphasising the full authorship of the dead bird bodies, I would like to argue that given the methodological complexities of challenging human exceptionalism, it at least offers them what Henry Buller terms as 'the possibility of mattering'.[85] Therefore, just as the craft practitioner is like an 'accomplished storyteller whose tales are told in the practice of their craft rather than in words', the craft researcher must become an accomplished storyteller whose craft (hi)stories are told in more than just words.[86]

Thus, third, and finally, to story practice is also to recognise that story*ing* often requires more than words. This connects back to the non-representational challenge to move to the 'somewheres words can't take you'[87] as words inevitably 'fall short' of describing practices. It also connects to Sarah Whatmore's call for researchers to supplement 'the familiar repertoire of humanist methods (which generate text and talk) with experimental practices that amplify other sensory, bodily and affective registers and extend the company and modality of what constitutes a research subject'.[88] These instructions are particularly relevant for the study of craft practices as not only are they always 'more-than-human' but also as my analysis demonstrated the more-than-human embodiments and materialities of craftwork are often refractory to written forms of codification and expression. Researchers attempting to witness and describe craft and skilled practices should therefore think carefully about the range of methodological and presentational styles – textual, archival, visual and performative – they have at their disposal before committing to an approach or set of approaches. However, what they should commit to from the outset is a period of apprenticeship, or observant participation, of and with the craft as it is only through gaining familiarity with the particular craft or practice that the most sympathetic method for witnessing and describing it will suggest itself. For example, when mediating between the archival instructions and the contemporary practice witnessed, it was precisely my familiarity, yet, importantly, lack of fluency, that amplified my identification of continuities and discontinuities between past and present practices, aiding their articulation. This underlines the serious empirical potential of apprenticeship as not only is the apprentice more able to story a craft (i.e. by making the tacit explicit), but it is also more open to experimenting with methods and ways of telling. And this connects to my final point: the storying of practice is also a way of keeping it going, as to story practice is not just to sit on the sidelines and observe it, rather it involves actively taking up the strands of a practice and weaving them into your own contexts of practice. Therefore, far from deadening, to story a craft practice is to continue it.

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I would like to sincerely thank Peter Summers for allowing me to observe and record his exceptionally skilled taxidermy practice. Taxidermy is often cast as macabre or gruesome; however, in Peter's hands, it becomes a wondrous process to witness, and I consider myself extremely privileged to have been in a position to do so. I am also grateful to Peter and the National Museum Scotland for permitting me to incorporate the video stills.

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Notes

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A cultural-historical geographer by training, my research broadly focuses on theories, histories, and geographies of practice. This focus has led me to engage empirically with a range specialised skills (e.g. taxidermy), practioners (e.g. artists and architects), and places of practice (e.g. museums, galleries and archives) and to develop practice-based methodologies.